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Pradeep Bahl

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EXAMINER

BHATTACHARYA, SAM

ART UNIT

PAPER NUMBER

2617

MAIL DATE

DELIVERY MODE

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

|                              |                                      |                                      |  |
|------------------------------|--------------------------------------|--------------------------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/804,357 | <b>Applicant(s)</b><br>BAHL, PRADEEP |  |
|                              | <b>Examiner</b><br>Sam Bhattacharya  | <b>Art Unit</b><br>2617              |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-36 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-36 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. ____.                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>see attached 1449s</u> .                                      | 6) <input type="checkbox"/> Other: ____.                          |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-36 rejected under 35 U.S.C. 102(b) as being anticipated by Boden et al. (US 6,832,322).

Regarding claim 1, Boden discloses a method for persisting virtual private network structures across multiple network addresses assigned to a mobile node, the method comprising: setting up a virtual private network tunnel between a virtual private network tunnel server and the mobile node, wherein virtual private network structures supporting the virtual private network tunnel are based upon a home address specified for the mobile node; assigning a new network address to the mobile node, the new network address differing from the home address for the mobile node; transmitting, by the mobile node, a binding update to the virtual private network tunnel server specifying the new network address; and creating a mapped relation from the new network address to the home address for the mobile node, thereby facilitating continued use of virtual private network structures that are based upon the home address for the mobile node. See FIG. 2 and col. 5, lines 26-52.

Regarding claim 2, Boden discloses that the virtual private network structures comprise security structures. See col. 7, lines 43-67.

Regarding claim 3, Boden discloses the security structures comprise Internet security structures. See col. 8, lines 22-45.

Regarding claim 4, Boden discloses the virtual private network structures comprise tunnel structures. See col. 7, lines 43-67.

Regarding claim 5, Boden discloses the creating step comprises updating, by the virtual private network tunnel server, a mapping structure to incorporate the new network address information provided within the binding update. See col. 5, lines 26-52.

Regarding claim 6, Boden discloses after the transmitting step, the further steps of: receiving, by the mobile node, a message packet from the virtual private network tunnel server including the new network address; and replacing, by the mobile node, the new network address by the home address in a destination field of the received message packet. See col. 7, lines 19-42.

Regarding claim 7, Boden discloses the replacing step is performed by an intermediate protocol stack layer that implements packet address handling policies and wherein the received message packet is thereafter passed up to clients of the intermediate protocol stack layer.

Regarding claim 8, Boden discloses the intermediate protocol stack layer comprises an Internet protocol layer. See col. 7, lines 43-67.

Regarding claim 9, Boden discloses after the transmitting step, the further step of: placing, by the mobile node, the new network address within the source address field and the home address within an extension header of packets transmitted to the virtual private network tunnel server. See col. 5, lines 26-52.

Regarding claim 10, Boden discloses replacing, by the virtual private network tunnel server, the new network address by the home address specified within the extension header of the

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packets transmitted by the mobile node to the virtual private network tunnel server. See col. 7, lines 19-42.

Regarding claim 11, Boden discloses the replacing step is performed by an intermediate protocol stack layer that implements packet address handling policies and wherein the received packets are thereafter passed up to clients of the intermediate protocol stack layer. See col. 7, lines 43-67.

Regarding claim 12, Boden discloses a computer-readable medium including computer-executable instructions for facilitating persisting virtual private network structures across multiple network addresses assigned to a mobile node, the method comprising: setting up a virtual private network tunnel between a virtual private network tunnel server and the mobile node, wherein virtual private network structures supporting the virtual private network tunnel are based upon a home address specified for the mobile node; assigning a new network address to the mobile node, the new network address differing from the home address for the mobile node; transmitting, by the mobile node, a binding update to the virtual private network tunnel server specifying the new network address; and creating a mapped relation from the new network address to the home address for the mobile node, thereby facilitating continued use of virtual private network structures that are based upon the home address for the mobile node. See col. 5, lines 26-52.

Regarding claim 13, Boden discloses the virtual private network structures comprise security structures. See col. 8, lines 22-45.

Regarding claim 14, Boden discloses the security structures comprise Internet security structures. See col. 7, lines 43-67.

Regarding claim 15, Boden discloses the virtual private network structures comprise tunnel structures. See col. 7, lines 19-42.

Regarding claim 16, Boden discloses the creating step comprises updating, by the virtual private network tunnel server, a mapping structure to incorporate the new network address information provided within the binding update. See col. 5, lines 26-52.

Regarding claim 17, Boden discloses computer executable instructions for performing, after the transmitting step, the further steps of: receiving, by the mobile node, a message packet from the virtual private network tunnel server including the new network address; and replacing, by the mobile node, the new network address by the home address in a destination field of the received message packet. See col. 7, lines 43-67.

Regarding claim 18, Boden discloses the replacing step is performed by an intermediate protocol stack layer that implements packet address handling policies and wherein the received message packet is thereafter passed up to clients of the intermediate protocol stack layer. See col. 8, lines 22-45.

Regarding claim 19, Boden discloses the intermediate protocol stack layer comprises an Internet protocol layer. See col. 7, lines 19-42.

Regarding claim 20, Boden discloses computer-executable instructions for performing, after the transmitting step, the further step of: placing, by the mobile node, the new network address within the source address field and the home address within an extension header of packets transmitted to the virtual private network tunnel server. See col. 5, lines 26-52.

Regarding claim 21, Boden discloses a mobile network node facilitating persisting virtual private network structures across multiple network addresses assigned to the mobile node, the

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mobile node including a communications protocol stack comprising computer-executable instructions facilitating performing, by the mobile node, the steps of: setting up a virtual private network tunnel between a virtual private network tunnel server and the mobile node, wherein virtual private network structures supporting the virtual private network tunnel are based upon a home address specified for the mobile node; assigning a new network address to the mobile node, the new network address differing from the home address for the mobile node; transmitting, by the mobile node, a binding update to the virtual private network tunnel server specifying the new network address; and creating a mapped relation from the new network address to the home address for the mobile node, thereby facilitating continued use of virtual private network structures that are based upon the home address for the mobile node. See col. 5, lines 26-52.

Regarding claim 22, Boden discloses the virtual private network structures comprise security structures. See col. 7, lines 43-67.

Regarding claim 23, Boden discloses the security structures comprise Internet security structures. See col. 5, lines 26-52.

Regarding claim 24, Boden discloses the virtual private network structures comprise tunnel structures. See col. 8, lines 22-45.

Regarding claim 25, Boden discloses computer executable instructions for performing, after the transmitting step, the further steps of: receiving, by the mobile node, a message packet from the virtual private network tunnel server including the new network address; and replacing, by the mobile node, the new network address by the home address in a destination field of the received message packet. See col. 7, lines 19-42.

Regarding claim 26, Boden discloses the replacing step is performed by an intermediate protocol stack layer that implements packet address handling policies and wherein the received message packet is thereafter passed up to clients of the intermediate protocol stack layer. See col. 8, lines 22-45.

Regarding claim 27, Boden discloses the intermediate protocol stack layer comprises an Internet protocol layer. See col. 7, lines 19-42.

Regarding claim 28, Boden discloses computer-executable instructions for performing, after the transmitting step, the further step of: placing, by the mobile node, the new network address within the source address field and the home address within an extension header of packets transmitted to the virtual private network tunnel server. See col. 5, lines 26-52.

Regarding claim 29, Boden discloses a virtual private network (VPN) server facilitating persisting virtual private network structures across multiple network addresses assigned to a mobile node, the VPN server including computer-executable instructions facilitating performing, by the VPN server, the steps of: setting up a virtual private network tunnel between the VPN server and the mobile node, wherein virtual private network structures supporting the virtual private network tunnel are based upon a home address specified for the mobile node; first receiving, from the mobile node, a binding update to the virtual private network tunnel server specifying a new network address that was assigned to the mobile node, the new network address differing from the home address for the mobile node; and creating a mapped relation from the new network address to the home address for the mobile node, thereby facilitating continued use of virtual private network structures that are based upon the home address for the mobile node. See col. 5, lines 26-52.



Regarding claim 30, Boden discloses the virtual private network structures comprise security structures. See col. 7, lines 43-67.

Regarding claim 31, Boden discloses the security structures comprise Internet security structures. See col. 7, lines 19-42.

Regarding claim 32, Boden discloses the virtual private network structures comprise tunnel structures. See col. 7, lines 43-67.

Regarding claim 33, Boden discloses the creating step comprises updating, by the virtual private network tunnel server, a mapping structure to incorporate the new network address information provided within the binding update. See col. 5, lines 26-52.

Regarding claim 34, Boden discloses a computer executable instructions for performing, after the first receiving step, the steps of: receiving, by the VPN server, a message packet from the mobile including the new network address; and replacing, by the virtual private network tunnel server, the new network address by the home address specified within an extension header of the received message packet. See col. 8, lines 22-45.

Regarding claim 35, Boden discloses the replacing step is performed by an intermediate protocol stack layer that implements packet address handling policies and wherein the received packets are thereafter passed up to clients of the intermediate protocol stack layer. See col. 7, lines 43-67.

Regarding claim 36, Boden discloses the intermediate protocol stack layer comprises an Internet protocol layer. See col. 7, lines 19-42.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sam Bhattacharya whose telephone number is (571)272-7917. The examiner can normally be reached on Weekdays, 9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, George Eng can be reached on (571) 272-7495. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

sb

/Sam Bhattacharya/  
Examiner, Art Unit 2617